



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
AIR, WASTE AND TOXICS

Fredrick Moore
Oregon Department of Environmental Quality
Eastern Region Hazardous Waste Program
475 NE Bellevue Dr., Suite 110
Bend, Oregon 97701

Re: Review of Revised Draft Post-Closure Permit, Lockheed Martin, The Dalles, Oregon
ORD 05222 1025

Dear Mr. Moore:

As requested, the Environmental Protection Agency, Region 10 (EPA) is providing comments (enclosed) on the revised draft hazardous waste post-closure permit to be issued under the Resource Conservation and Recovery Act (RCRA) for the Lockheed Martin facility located in The Dalles, Oregon. The revised draft was received by EPA on February 21, 2012. EPA noted that a number of the comments we provided to you on May 9, 2011, regarding the previous draft permit were not addressed. The unaddressed comments are repeated in the enclosed comments.

On March 20, 2012, EPA received a list of further changes the Oregon Department of Environmental Quality (DEQ) intends to make to the permit. EPA is not including comments regarding these further changes at this time, as this list was not accompanied by revised permit language.

EPA's comments on the draft Five Year Review for the former Martin Marietta CERCLA site are also being forwarded to you today under separate cover. As discussed in those comments, outstanding issues related to the scope of the current draft RCRA Permit, and what CERCLA O&M provisions are covered in the RCRA Permit under the EPA/DEQ MOA, have resulted in EPA commenting on broad overall issues regarding cleanup actions at the facility. As a result, today's comments regarding the draft RCRA permit are focused on permit provisions regarding post-closure care for the RCRA landfill, and do not include section-by-section comments on draft permit language related to the CERCLA units. Further comments regarding corrective action provisions of the draft permit may be provided at a later date, if needed following resolution of EPA's comments on the draft Five Year Review.

Please contact me at 206 553-8506 or brown.christy@epa.gov if you have any questions regarding these comments or to schedule a teleconference.

Sincerely,

A handwritten signature in black ink, appearing to read 'Christy Brown', with a stylized flourish at the end.

For Christy Brown
Project Manager
Office of Air, Waste and Toxics

Enclosure

cc: Elizabeth Drubeck, DEQ

EPA Review of Revised Draft Post-Closure Permit
Lockheed Martin, The Dalles, Oregon
ORD 05222 1025
March 29, 2012

The federal RCRA regulations cited in these comments have been adopted by Oregon by administrative rule, Oregon Administrative Rule (OAR), section 340-10-0002 as altered by OAR Chapter 340, Divisions 100-106, 109, 111, 113, 120, 124, and 142, and authorized by EPA pursuant to § 3006 of RCRA. All citations in these comments to Title 40 CFR are citations to 40 CFR as adopted by OAR 340-100-0002 and as otherwise modified or specified by OAR, divisions 100 to 106, 109, 111, 113, 120, 124, and 142.

1. The current permit for this Facility (July, 2000) includes several conditions and attachments that have not been carried through into the draft permit. The Statement of Basis does not include DEQ's rationale for removing these requirements.

Missing permit conditions include the following:

- I.J: Documents to be Maintained at the Facility;
- II.F: Personnel Training;
- II.I.5: Arrangements with Local Authorities;
- II.J: Contingency Plan;
- II.Q: Liability Requirements;
- Attachment A: Contingency Plan; and
- Attachment E: Personnel Training Notebook.

These documents and permit conditions are required by 40 CFR Part 264 for a hazardous waste disposal facility. These requirements are also appropriate for a facility which includes landfill units containing cyanide wastes. The Personnel Training Plan and Contingency Plan in the current permit are straightforward, tailored to this facility, and do not appear to impose an unreasonable burden on the Permittees. Revise the permit to include these plans.

2. As discussed in EPA's comments of May 2011, clear and legally correct regulatory citation language was developed jointly by Oregon's Department of Justice and EPA's Office of Regional Counsel for the UMCDF permit. EPA expects that the citations be the same in both permits. Replace the footnote found in this draft permit with the regulatory citation language found in the UMCDF permit. Questions may be directed to Mr. Gary Vrooman of the Oregon Department of Justice.
3. Page 21. As noted above, the current permit includes Permit Condition I.J, "Documents to be Maintained at the Facility." The Statement of Basis does not discuss the rationale for excluding this requirement from the draft permit. Revise the draft permit to include the following permit condition:

I.J. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittees shall maintain in accordance with Permit Condition I.E.7. [Duty to Provide Information] throughout the post-closure period, all amendments, revisions and modifications to these documents. Document(s) must address the following:

1. A Waste Analysis Plan, as required by 40 CFR §264.13 and this Permit. For purposes of this Condition, the analysis found in the 1998 Part B permit application shall suffice.
 2. An Inspection Schedule, as required by 40 CFR §264.15(b)(2) and this Permit.
 3. A Personnel Training document and records, as required by 40 CFR §264.16(d) and this Permit.
 4. A Contingency Plan, as required by 40 CFR §264.53(a) and this Permit.
 5. An Operating Record, as required by 40 CFR §264.73 and this Permit.
 6. A Post-Closure Plan, as required by 40 CFR §264.118(a) and this Permit.
 7. An Annually-Adjusted Cost Estimate for facility post-closure and corrective action, as required by 40 CFR §§264.144(d) and 264.101 and this Permit.
 8. CERCLA Inspection, Monitoring, Operation and Maintenance documents containing the requirements derived from the Lockheed Martin (fka Martin Marietta) Consent Decree No. 89-714-MA.
4. Page 23, Section II.B.2, Hazardous Waste Generated Onsite. This permit condition requires that the leachate from the hazardous waste landfill be discharged in accordance with the NPDES permit or manifested offsite as a K088 hazardous waste. Unless it is DEQ's intention to limit the Permittees' options for management of this waste (this was not noted in the Statement of Basis), the language of the current permit should be retained. This permit condition should be revised to require that "... the treatment and disposal of K088 waste generated at the RCRA landfill is managed in accordance with applicable 40 CFR 262, 263, 264, and 268 regulations and conditions found in this Permit."
5. Page 24, Section II.C.1.a. EPA previously commented that this permit condition must be revised to maintain a gap-free fence, rather than "... not allowing new gaps." The revised permit requirement ("... not allowing gaps in the fence getting larger.") does not meet the intent of 40 CFR §264.14, which requires that a hazardous waste facility prevent unauthorized entry of persons or livestock. This permit condition must be revised to require that the Permittees maintain a fence in good repair which completely surrounds the RCRA landfill. This comment also applies to permit condition II.C.2.a.

6. EPA is very concerned that DEQ's October 25, 2011, Trip Report documents holes in the fence, indications of possible human activity, presence of wildlife, and extensive rodent damage to the landfill cover at the Scrubber Sludge Pond. This leads us to question the adequacy of the Permittees' maintenance activities and raises questions about the current state of the RCRA landfill cover and security system. EPA strongly recommends reviewing recent inspection and maintenance records and/or conducting an inspection of the RCRA landfill prior to issuance of this draft permit to determine whether the Post-Closure Plan and/or the Permittees' performance of the required post-closure activities are sufficient to ensure ongoing protection of human health and the environment.
7. Page 24. As noted above, the current permit includes Permit.Condition II.F, "Personnel Training." The Statement of Basis does not discuss the rationale for excluding this requirement from the draft permit. Revise the permit to include the following permit condition:

II.F. PERSONNEL TRAINING

The Permittees shall conduct personnel training as required by 40 CFR §264.16. This training program shall follow the provisions found in Attachment E of this Permit [Personnel Training Notebook]. The Permittees shall maintain training documents and records, as required by 40 CFR §264.16(d) and (e) and Attachment E of this Permit [Personnel Training Notebook].

8. Page 26, Section II.E.3, Access to Communications and Alarm Systems. As noted in EPA's comments of May 2011, this permit condition requires that any employee performing work within the Facility must have a cellular phone able to communicate with the Permittees. The permit must be revised to specify that the employee must *contact* the Permittees and in what circumstances.
9. Page 26. As noted above, the current permit includes Permit.Condition II.I.5, "Arrangements with Local Authorities." The Statement of Basis does not discuss the rationale for excluding this requirement from the draft permit. Revise the draft permit to include the following permit condition:

II.I.5. Arrangements with Local Authorities

The Permittees shall maintain arrangements with state and local authorities, as required by 40 CFR §264.37. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittees, the Permittees must document this refusal.

10. Page 24. As noted above, the current permit includes Permit.Condition II.J, “Contingency Plan.” The Statement of Basis does not discuss the rationale for excluding this requirement from the draft permit. Revise the draft permit to include the following permit condition:

II.J. CONTINGENCY PLAN

II.J.1. Implementation of Plan

The Permittees shall immediately carry out the provisions of the Contingency Plan, as outlined in Attachment A [Contingency Plan] of this Permit, whenever there is a fire, explosion, or release of hazardous waste or constituents which could threaten human health or the environment.

II.J.2. Copies of Plan

The Permittees shall maintain a copy of the Contingency Plan at the Facility, in accordance with Permit Condition I.E.7. [Duty to Provide Information], and shall provide a copy to all police departments, fire departments, hospitals, and State and local emergency response teams that may be asked to provide emergency assistance, as required by 40 CFR §264.53.

II.J.3. Amendments to Plan

The Permittees shall review and immediately amend, if necessary, Attachment A of this Permit [Contingency Plan], as required by 40 CFR §264.54.

II.J.4. Emergency Coordinator

A trained emergency coordinator shall be available at all times in case of an emergency, as required by 40 CFR §264.55. See Attachment A of this Permit [Contingency Plan].

11. Page 27. As noted above, the current permit includes Permit.Condition II.Q, “Liability Requirements.” The Statement of Basis does not discuss the rationale for excluding this requirement from the draft permit. Revise the draft permit to include the following permit condition:

II.Q. LIABILITY REQUIREMENTS

II.Q.1. The Permittees shall demonstrate continuous compliance with the requirement of 40 CFR §264.147(a) to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least \$1 million per occurrence, with an annual aggregate of at least \$2 million, exclusive of legal defense costs.

II.Q.2 The Permittees also shall demonstrate continuous compliance with the 40 CFR §264.147(b) requirement to have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs.

12. Page 27, Section II.J, Financial Assurance for Facility Post-Closure and Corrective Action. As noted in EPA's comments of May 2011, this permit condition contains a typographical error which renders it unenforceable. Revise the second sentence of this permit conditions as follows: "The Permittees must provide the documentation to the Manager within 60 days of when the Permittees makes the cost estimate made in accordance with Permit Condition II.I. [Cost Estimate for Post-Closure Care and Corrective Action]."
13. Page 29, Section III.A, Scope of Post-Closure Care. This section was revised in response to EPA's comments to clarify that the former CERCLA units are subject to corrective action under 40 CFR §264.101, and not post-closure care requirements for hazardous waste landfills. Retaining the discussion of required corrective action in this permit condition, which clearly states that this section only pertains to the hazardous waste landfill, remains confusing. Revise this permit condition to discuss only the unit for which a post-closure permit is required.
14. Page 30, Section III.B.2. EPA appreciates the clarification regarding the regulatory status of the leachate collection tank. Although leachate production has dropped at this time such that this unit currently qualifies as a conditionally exempt small quantity generator, there is no guarantee that leachate production will remain at this low level for the next 10 years. Revise this permit condition to require that the unit be operated in accordance with 40 CFR §261.5 and 40 CFR Part 262; this wording will result in an enforceable requirement that leachate be removed from the unit every 90 days if leachate production increases at any time during the 10 year term of this permit.
15. Page 33, Section III.F.2. As discussed in EPA's comments of May 2011, the draft permit must be revised to include a final as-built and/or Construction Report for the hazardous waste landfill, including all approved changes and alterations to the landfill.
16. Page 35, Section IV, Groundwater Detection Monitoring. The Statement of Basis indicates that draft permit includes a detection monitoring program, as DEQ believes the hazardous waste landfill is not leaking and "... recent environmental reviews in the immediate area may deem the monitored groundwater to have no beneficial use." EPA noted that the current permit includes a modified compliance monitoring program. Of particular concern is that the requirements found in the current permit were based on a well-argued conclusion that, because the landfill does not meet minimum technology

requirements, *there is an increased potential for release from the unit*. Furthermore, the current permit states “[B]ecause the current bottom liner is less protective than what the regulations currently require, the Department issues this Permit considering that any detected contamination above the groundwater protection standard is likely from the landfill which leads this Permit to more straightforwardly report the analytical results ... and more forward with notification and analysis”

The language of the Statement of Basis and draft permit represent a significant shift in DEQ’s conclusions. EPA disagrees with the groundwater monitoring approach found in the draft permit, as noted in our comments of May 2011 and further discussed below. At a minimum, the language found in the Statement of Basis indicating that groundwater “may” have no beneficial use must be deleted in its entirety, as it has no relevance to developing a robust detection monitoring program for the RCRA landfill.

17. Page 36, Section IV.C, Monitoring Constituents. As no changes were made to this section of the permit, EPA is repeating its comment of May 2011. Since this permit begins a new statistical test, four observations or sampling events may not be sufficient for a valid statistical analysis. EPA’s Unified Guidance (Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, EPA/530/R-09/007, 2009) recommends that a minimum of at least 8 to 10 independent background observations be collected before running most statistical tests. It is recommended at a minimum that quarterly sampling be conducted for two years and then semi-annually for the last two years as long as there are no seasonal effects. This would be important if a decision is made to use an interwell approach.
18. Page 37, Section IV.C.2. As no changes were made to this section of the permit, EPA is repeating its comment of May 2011. This permit condition requires the Permittees to reevaluate each monitoring well’s upper prediction limits for each constituent “using appropriate EPA and statistical guidance.” If the intent of this permit condition is to require the Permittees to reevaluate using EPA’s Unified Guidance, this must be stated directly. The permit must be revised to specify what method and/or assumptions must be used in the reevaluation.
19. Page 38, Section IV.F, Detection Monitoring Limits and Definitions to Indicate a Significant Statistical Increase. As no changes were made to this section of the permit, EPA is repeating its comment of May 2011. The draft permit proposes comparing data from each individual monitoring well to historical data from that same well (intrawell) using the Upper Prediction Limits statistical test. This proposal is not consistent with the intent of this statistical test, as it is designed to compare data between wells (interwell). MW-5S is an up-gradient monitoring well location, but appears to have higher concentrations of weak acid dissociable (WAD) cyanide, fluoride and sulfate than the monitoring wells located down-gradient of the regulated landfill. This may be why the

draft permit proposes to conduct intrawell comparisons, as it would be hard to compare the results using an interwell approach in this situation. Given the higher up-gradient contaminant concentrations, a different statistical test such as the Shewhart-CUSUM control charts may be a better choice. Alternatively, if additional monitoring wells are installed upgradient of the RCRA landfill and found to be free of contaminants (we recommend at least one and perhaps two new upgradient wells would be appropriate), then an interwell approach for the statistical test could be used.

20. Page 46, Section V.C.5. EPA appreciates inclusion of the specific reference to the design plans and operating practices for the run-on and run-off collection facilities at the landfill. However, as discussed in EPA's comment of May 2011, these design plans and operating practices must be included as an attachment to this permit.
21. Page 46, Section V.C.6. This new permit condition states that the Permittees may use a vacuum system at the landfill to provide ambient carbon dioxide to lessen the cyanide toxicity and to dry the landfill mass to lessen the hydraulic head. The draft permit must be revised to specify all applicable operating parameters and restrictions (such as no uncontrolled venting). The Attachments to the draft permit must also be revised to incorporate this system into the inspection program, training plan, contingency plan, and post-closure cost estimate, and to include as-built drawings of the system and all operating procedures.
22. Page 47, Section V.E. EPA recommends further revising this new section to state only that the leachate tank is a unit subject to the generator requirements of 40 CFR §261.5 and 40 CFR Part 262, rather than stating the unit is a "conditionally exempt generator" tank. As discussed above, this wording will result in robust, enforceable permit language without the administrative burden of permit modification if leachate production increases during the term of this permit.
23. Figure 2, RCRA Landfill Showing Location of Monitoring Wells. As revised Figures were not provided with the March 2012 draft permit, EPA is repeating its comment of May 2011. It would be helpful if this figure included the most recent groundwater elevation as an example, and graphics showing the groundwater flow direction.
24. Attachment A, Inspection Plan. As revised Attachments were not provided with the March 2012 draft permit, EPA is repeating its comment of May 2011. The permit must be revised to include the procedure for the "Quarterly Wet Test" of the leak alarm and high level included on the RCRA Landfill Post-Closure Care Leachate Collection System Inspection Form.

25. Attachment B, Post-Closure Plan. As revised Attachments were not provided with the March 2012 draft permit, EPA is repeating its comment of May 2011. This attachment could be substantially edited to delete conditions already found in the permit. At a minimum, it should be checked carefully against the permit language to avoid inconsistencies.